

### *ABSTRACT OF THE DISCLOSURE*

In an electronic device having a circuit outputting a vector sum of two quadrature vector signals, an offset compensating device compensates the offset contained in the vector sum. The offset compensating device aims to flexibly adapt to deviation in characteristics and performances and various fluctuations, and to compensate offset stably and accurately. 5 The offset compensating device includes a deviation monitor unit creating a vector signal by A/D-converting the aforementioned vector sum and by quadrature-demodulating it and monitoring the deviation of the DC components superposed on the vector signal, and an adaptive control unit updating the compensation vector determined in advance, based on 10 adaptive algorithm minimizing expectation value of the product of the inner product between an increment vector and the compensation vector, and the latest deviation vector, and adding the compensation vector to an offset vector to be inputted, while being superposed on the input signal, to a circuit.